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TITLE: Antenna

Brief Summary Text (11):

However, the conventional antenna 130 having the foregoing structure can be resonant only at an odd number multiple of the fundamental frequency but hardly operated at any desired group of frequencies. It is hence necessary for radiation of electric waves at different frequencies to provide a corresponding number of the antennas. The more the number of the antennas, the greater the space for installation of the antennas will be increased. Also, an increase in the number of the antennas requires a more number of transmission lines thus further increasing the installation space. Accordingly, when the installation space is too large, the antenna can hardly be mounted with less visibility thus failing to improve the appearance.

Brief Summary Text (12):

The present invention has been developed in view of the above technical drawbacks and the object is to provide an antenna which can radiate electric waves at a plurality of desired frequencies while it is made relatively simple in the structure and minimized the antenna body.

Brief Summary Text (38):

Said transmission/reception circuit may include a plurality of amplifiers which are different from each other in the gain for transmission and/or reception.

Brief Summary Text (39):

A plurality of said amplifiers for transmission may be connected to said signal transmission cable via a signal divider, said signal divider dividing a signal input from said signal transmission cable to a plurality of signals and outputting the signals to said amplifiers for transmission.

Brief Summary Text (40):

A plurality of said amplifiers for reception may be connected to said signal transmission cable via a signal compositor, said signal compositor compounding a plurality of signals input from said amplifiers for reception to one signal and outputting the signals to said signal transmission cable.

Detailed Description Text (34):

It may happen that the first and second resonant frequencies f1 and f2 in the antenna of the first embodiment fail to have a favorable level of impedance matching. This can be compensated by an antenna 21 shown in FIG. 9. The antenna 21 includes a pair of matching conductors 22 provided on the grounding conductor 11 in addition to the configuration of the antenna 10 of the first embodiment. As a result, the impedance of the antenna 21 can be matched with the impedance of a feeding line (not shown). In case that the impedance is too low, the matching conductor 22 is connected via a conductor 25 to the antenna element 13 as shown in an antenna 24 of FIG. 10. Accordingly, the impedance can be increased and the impedance matching can be improved.

Detailed Description Text (83):

It is noted that a plurality of amplifiers different from each other in the operating frequency may be used instead of amplifiers 86A, 86A' or 86B, 86B'. In this case, the transmitted or received electric waves with various frequencies can be obtained in transmission and reception.

CLAIMS:

29. The antenna according to claim 27, wherein said transmission/reception circuit further includes a plurality of amplifiers which are different from each other in amplifying gain for at least one of transmission and reception.

31. The antenna according to claim 29, further comprising a signal compositor, wherein at least a portion of said amplifiers are for reception and are connected to the signal transmission cable via said signal compositor, said signal compositor compounding a plurality of signals input from said amplifiers for reception to one signal and outputting the signal to the signal transmission cable.

32. The antenna according to claim 27, wherein said transmission/reception circuit further includes a plurality of amplifiers which are different from each other in operating frequency for at least one of transmission and reception.

34. The antenna according to claim 32, further comprising a signal compositor, wherein at least a portion of said amplifiers are for reception and are connected to the signal transmission cable via said signal compositor, the signal compositor compounding a plurality of signals input from said amplifiers for reception to one signal and outputting the signal to the signal transmission cable.